DESIGN HANDBOOK

Introduction

Vision is a fundamental aspect of human insight. It is central in shaping our physical, spatial and aesthetic world, in grasping and experiencing the aspects of nature, and above all, it is central to our self view. The ability to see ourselves as a part of a much larger environment is a major component in the process of living. We are equally dependent on the artist, sculptor and designer who heighten our perception of the joys, innuendos and sorrows of life. They have, in a majority of cases, a special sensitivity to the human condition. The immediate and direct response of the artist to the aesthetic qualities of the world helps us establish a rapport with our present and a view of the future.

In Structure in Art and Science, Georgy Kepes states that, "The most powerful imaginative vision is structure-oriented." As the past fades, the artist seeks out new ordering principles which in turn are accepted as fundamental realities. Each artistic interpretation furthers the understanding of the natural world and in turn imparts considerable knowledge concerning the structure of the world. Creative exploration in the arts has yielded significant parallels with scientific and technological investigation. While the technological imperative has been responded to, and is clearly in evidence in the breadth and depth of national interstate highway system, artistic creativity on the roadway
has been seriously restricted.

It is this very limitation that has forced this project into existence. A recognition that our national highways have not been seen as a creative venture but as a venture of expediency. This project has been designed to introduce artistic structure to the roadway environment. Structure, in its basic sense, is the created unity of parts and joints of finite entities. It is a pattern of "dynamic cohesion" says Kepes, "in which noun and verb, form and to form, are coexistent and interchangeable; of interacting forces perceived as a single spatio-temporal entity."

It is the intention of this handbook to establish conditions that will lead to a singular goal: the introduction of artistic intent into the planning, design and construction of the highway environment. While it is recognized that the designer must, from a technological point of view, be able to decide the type of bridge or road alignment, the size of cuts or embankments, the possibility of whether or not to eliminate obstructing supports - all elements which are decisive in determining the functional workings of the roadway solution - the knowledge of artistic and creative enterprise is absolutely necessary and indispensable. The creative vision will introduce a formed response in which the technological and functional solution will be fully integrated within an aesthetic setting and not simply the reverse. It is not the intent to merely provide a handbook of sculptural or artistic form for the designer to "place" within the roadway, but rather, to structure the roadway, where the structure, so to speak,
sinks beneath the surface, is latently present and only indirectly
discernable. The latency of structure emphasizing the "expressive
content" of the designed response. The aesthetic image as
such is so clearly established that it reaches it full effectiveness
independently of the underlying structure. The desired goal is
to achieve and aesthetic balance between those elements that
constitute the highway "strip" and the landform on which it rests.

It is clear that the circulation system is most prone to technologi-
cal development, and therefore, it must be adaptable to
change. The elements that compose the roadway must
change, not only to meet new demands, but also, to respond to
new attitudes about the human and natural environment. As a
fine highway expresses the nature of vehicular movement, a
poorly designed one reflects all the negative characteristic of its
design. This relationship has been proven time and time again
throughout the highway system. Because of the prevalent
ugliness of much of our movement system, we consider roads
as regretfully necessary things that must be supplied but should
be concealed from public view. Roads, electric lines, parking
areas, water towers and billboards, to name a few, are either
eliminated, camouflaged or hidden behind vast quantities of
flowering trees, bushes or chain-link fences. It is our contention,
that what is needed, is an even clearer visual expression of the
essential elements of the movement system. Power lines,
bridges, television and radio towers, billboards, etc., can be
aesthetically integrated into the expressive content of the
highway system.
These very elements that populate the highway strip can be seen as furniture - highway furniture. Whether lighting standards, guardrails, bollards, bridges, toll booths, rest areas or scenic overlooks, the highway is defined by its furniture. The selection of highway furniture is not unlike that same process used to select furniture for the office, residence, hospital, school or recreation area. Issues of color, style, forms, scale and historical period and content are but a few of the design constraints. The overall image conveyed, and the means by which the furniture is arranged to suit circulation patterns, is also important. Similar principles apply to the selection, placement, arrangement and distribution of furniture along the roadbed. As the effect of the room is judged by its sense of totality, so will the expressive content of the highway.

The American interstate highway system is undergoing a rapid change due to the rebuilding of the roadway infrastructure. The time to introduce change is the present. Through the introduction of environmental sculpture, highway furniture, art forms and earth structures, in conjunction with the changing technological requirements, the highway will become better suited to meet the transportation needs of a changing society.

To demonstrate the potential for future change, six distinct categories of elements were developed to demonstrate the application of a "designed approach" in the planning, and construction of the roadway corridor. Each proposal cannot be considered as a solution but rather, a designed intent. Each one
represents a concrete art form where the inherent law is that of the underlying structure. The arrangement, placement or applicability of the ideas presented in this section, is intended to stimulate design attitudes rather than act as an inhibitor. Each category addresses one aspect of the highway environment. The role of the handbook, and the ideas contained within, is presented with the notion that each generation will leave its imprint on the highway strip. Whether, architect, artist, sculptor, planner, landscape architect, historian or contractor, etc., each will insert a new vocabulary of ideas that will bring new focus to the condition of the highway environment. This handbook represents the means to achieve that imprint.

Each category of designed element is presented in a variety of settings and conditions. The range of ideas and images reflects current concerns about the physical state of the highway. Each category should be seen as only part of a much larger image. It is important to understand that the elements, objects, places and spatial forms contained within, are designed to present the highway design profession with a broader range of aesthetic attitudes, images and ideas that, if accepted, will change the aesthetic climate of the highway.

The overall design philosophy is one that advocates the introduction of sculptural form and artifact into the highway environment to increase its inherent value to society. The artifacts are merely objects through which we understand ourselves, how we live and work, and the nature of our dreams. The ideas are
designed to generate pleasure within the framework of the driving experience. They are intended to stimulate the driver, passengers, and those who are within the influence of the highway corridor, through visual, tactile and intellectual means. In addition, they are designed to increase the safety of the roadway and introduce a means by which our national highway system can regain its expressive content. This handbook stresses the aesthetic identity over that of the technological one. In many respects, the central argument that underlies this project is: ART SAVES LIVES.